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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,772

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Junichi Maruyama

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MCDERMOTT WILL & EMERY LLP  
600 13TH STREET, N.W.  
WASHINGTON, DC 20005-3096

EXAMINER

SHAPIRO, LEONID

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

06/30/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/590,772	MARUYAMA, JUNICHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Leonid Shapiro	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9, 11, 12 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9, 11, 12 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 9,11,17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamaki (US 2003/0122750 A1) in view of Suzuki et al. (US 2004/0164301 A1).

As to claims 9, Tamaki teaches an organic EL display device (par. 0002) comprising: a dot-matrix type organic EL panel having a plurality of scanning lines (fig. 1A, items COM1-COMn, par. 0024) and a plurality of drive lines (fig. 1A, items SEG1-SEGN, par. 0024); a plurality of scanning arrangements connecting said scanning lines freely to a first potential or a second potential (figs. 1A,1C, items 180-1-180-n, pars. 0030,0032); drive switch arrangement for connecting said drive lines freely to a drive current source or an off potential (figs. 1A,1B, items 110,150,170, par. 0031); and control arrangement for causing said scanning switch arrangement to connect said scanning lines to said first potential thereby to select said scanning lines sequentially (fig. 1A, items 120-160, par. 0036) and to control the connected state of said drive switch arrangements (fig. 1A, items 110,150,170, par. 0039), wherein:

said scanning switch arrangement includes a first transistor for connecting said scanning lines to said first potential, and a second transistor for connecting said scanning lines to said second potential (fig. 1C, items 182-183), and

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said control arrangement changes, according to the number of said drive lines to be connected to said drive current source, the resistance of said second transistor corresponding to said scanning lines connected to said second potential changes (pars. 0042-0043), and

said control arrangement controls said first transistors of scanning switch arrangements, which are not selected for luminance, to be connected to said first potential ( $V_c$ ) (fig. 2, items  $V_c$ , 182, 183-3, pars. 0040-0043).

Tamaki does not disclose second transistor become an unselected state.

Suzuki et al. teaches the non-selected scanning line is set to higher impedance state (par. 0017).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teachings of Suzuki et al. into Tamaki system in order to decrease the charge/discharge power (par. 0017 in the Suzuki et al. reference).

As to claim 11, 17 Tamaki teaches control means changes, according to the number of said drive lines to be connected to said drive current source, the bias voltage of said second transistor corresponding to said scanning lines connected to said second potential to become the unselected state, thereby to change said resistance (par. 0042).

2. Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tamaki, Suzuki et al. in view of Muruyama et al. (US 2004/0061670 A1).

Tamaki, Suzuki et al. do not disclose temperature detecting means for detecting the temperature of said organic EL panel thereby to output temperature data, and said control means changes, according to the number of said drive lines to be connected to

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said drive current source and said temperature data, said resistance of said scanning switch means connected to said second potential.

Muruyama et al. teaches temperature detecting means for detecting the temperature of said organic EL panel thereby to output temperature data, and said control means changes, according to the number of said drive lines to be connected to said drive current source and said temperature data, said resistance of said scanning switch means connected to said second potential (fig. 1, items 2,5-6, par. 0028).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teachings of Muruyama et al. into Tamaki, Suzuki et al. system in order to generate a proper drive voltage according to an ambient temperature (par. 0015 in the Muruyama et al. reference).

### ***Response to Arguments***

3. Applicant's arguments filed 05/28/09 have been fully considered but they are not persuasive:

On page 6 of Remark, Applicant's stated that Tamaki's selection of scanning lines COM1-COMn for luminesce does not affect or relate to supply of drive voltages to the transistors 182 and 183-1-183-3 of the negative electrode output circuits 180-1-180-n. The signals inputted to the transistors 183-1-183-3 and the OR gate 181 determines the level of the voltage provided to the scanning line COM1. See paragraph [0032] and FIGS. 1A-1C. In contrast, claim 9 requires "said control arrangement" to "control[s] said first transistors of scanning switch arrangements, which are not selected for luminance,

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to be connected to said first potential." However, Tamaki teaches said control arrangement controls said first transistors of scanning switch arrangements, which are not selected for luminance, to be connected to said first potential (Vc) (fig. 2, items Vc,182,183-3, pars. 0040-0043).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Telephone inquire***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

06/22/09

/L. S./

Examiner, Art Unit 2629

/Richard Hjerpe/

Supervisory Patent Examiner, Art Unit 2629